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**BEFORE THE PUBLIC UTILITIES COMMISSION OF**

**THE STATE OF CALIFORNIA**

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| Application of Pacific Gas and Electric Company for Approval of the Retirement of Diablo Canyon Power Plant, Implementation of the Joint Proposal, And Recovery of Associated Costs Through Proposed Ratemaking Mechanisms (U39E). | Application 16-08-006 (Filed August 11, 2016) |

**PROTEST OF THE UTILITY REFORM NETWORK**


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September 15, 2016

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## PROTEST OF THE UTILITY REFORM NETWORK

Pursuant to Rule 2.6 of the Commission Rules of Practice and Procedure, The Utility Reform Network (TURN) hereby submits this protest to the application of Pacific Gas & Electric Company for approval of the retirement of the Diablo Canyon Power Plant and the associated provisions contained in the Joint Proposal.[1]

## I. PRELIMINARY DETERMINATION OF ISSUES TURN INTENDS TO ADDRESS AND EXPECTED PARTICIPATION

TURN has already devoted substantial time and resources to the review of PG&E's application and the Joint Proposal. TURN did not sign onto the Joint Proposal due to concerns regarding the treatment of license renewal costs and the replacement resource portfolio provisions. Moreover, TURN is engaged in active litigation with PG&E over the decommissioning cost estimate for Diablo Canyon and is not willing to settle or otherwise address decommissioning issues in this proceeding.

The issues to be addressed by TURN include, at a minimum, the following:

- The costs of continuing to operate Diablo Canyon after the expiration of the current license.

- The reasonableness of PG&E's proposal for replacement resources, modifications to ensure that all Diablo Canyon output is replaced by newly developed and incremental zero Greenhouse Gas (GHG) power

[1] Since the application was noticed on the Daily Calendar on August 16th, this protest is timely filed.

and mechanisms to collect costs for replacement resources (or assign responsibility for such procurement) to all customers.

- The reasonableness of PG&E's proposals relating to Energy Efficiency (EE) including the exclusive reliance on EE to satisfy the Tranche #1 procurement obligation, the use of "gross" EE savings (meaning inclusive of free riders) to meet Tranche #1 and #2 procurement obligations, the lack of sufficient persistence requirements to ensure that EE provides expected long-term value to customers and the grid, the criteria for permitting PG&E to propose its own EE programs, the use of the PAC test for assessing the relative cost-effectiveness of competing EE resources, and PG&E's proposed Tranche #1 budget.

- The reasonableness of permitting PG&E to recover any costs associated with license renewal activities.

- The reasonableness of various other provisions of the Joint Proposal.

TURN intends to participate by conducting discovery, participating in any workshops or site visits, preparing testimony, engaging in settlement negotiations, attending evidentiary hearings (if required), and filing briefs. TURN believes that hearings are likely to be necessary given the contested issues of fact presented by the initial application.

## II. TURN SUPPORTS THE PROPOSED SHUTDOWN OF DIABLO CANYON ON THE TIMELINE PROPOSED IN THE APPLICATION

PG&E proposes to not seek license renewal from the US Nuclear Regulatory Commission and will instead shutdown the existing units at Diablo Canyon no later than 2025. TURN has long been concerned that the long-term costs of owning and operating Diablo Canyon are excessive compared to alternative resource options and that the ratepayer and environmental risks of extended operations could be significant. Some of the largest risks involve the potential for a catastrophic accident, premature shutdown, poor operational performance or major new unanticipated capital expenditures. These risks would be minimized by committing to shut down the plant by 2025.

This proceeding offers the first opportunity for the Commission to make findings regarding the long-term cost-effectiveness of Diablo Canyon since 2011. In A.10-01-022, TURN reviewed PG&E's long-term cost effectiveness analysis of license renewal, identified critical deficiencies and raised serious concerns as to whether continued operations after the expiration of the current license would benefit ratepayers.[2] Since the dismissal of that application by the Commission, TURN has repeatedly sought an updated and more realistic analysis of the long-term costs for Diablo Canyon. Until this application, PG&E refused to provide any such updates.

Since A.10-01-022, there has been a growing divergence between the original cost forecasts presented in that proceeding and actual spending on plant capital and operations. Between 2011-2019, PG&E's actual and forecasted capital expenditures are projected to be 37% higher than assumed in the 2010 long-term forecast (a difference of about $500 million nominal). The divergence in recent years (2015-2016) is particularly severe (66% higher in 2015 and 82% higher in 2016) with the 2017 test year forecast running 33% above the 2010 estimate. With respect to O&M, PG&E's 2011-2017 actual costs are expected to exceed the 2010

[2] Testimony of David Schlissel on behalf of TURN, A.10-01-002, August 18, 2010. TURN specifically noted the omission of any costs to address the once-through cooling requirements established by the State Water Resources Control Board, the failure to include any significant seismic upgrade costs, the assumption that both units would operate at high capacity factors with no extended outages for an additional 20 years, and relatively minimal projections for ongoing capital expenditures.

long-term forecast by $157 million (nominal) with the largest divergences occurring in 2015-2017.[3]

TURN highlights these discrepancies to demonstrate the fact that Diablo Canyon costs have increased relative to the 2010 forecasts that were used to justify PG&E's pursuit of license renewal. Updated long-term forecasts that incorporate recent trends reveal that the continued operation of Diablo Canyon is likely to be costly for ratepayers and not justified relative to other cheaper resource alternatives. TURN intends to present forecasts in this proceeding that will assist the Commission in making factual determinations regarding the long-term costs of Diablo Canyon under a license renewal scenario. These forecasts should demonstrate the wisdom of not pursuing license renewal.

Moreover, the unexpected shutdown of the San Onfore Nuclear Generating Station (SONGS) highlights the need for advance planning to replace energy produced by a large baseload nuclear plant. In the case of SONGS, the lack of planning led to urgent actions to preserve reliability in the LA Basin and caused an increase in generation from gas-fired resources. Because the application proposes to develop a replacement portfolio of zero GHG resources, the planned retirement of Diablo Canyon need not lead to a similar result.

## III. PG&E SHOULD NOT BE PERMITTED TO RECOVER THE $53 MILLION INCURRED ON ITS OWN INITIATIVE TO PURSUE LICENSE RENEWAL

The Application requests authority for PG&E to charge customers for $52.7 million in costs associated with license renewal activities.[4] These costs would be

[3] All of this information was provided in TURN's testimony in PG&E's pending General Rate Case (A.15-09-001).
[4] PG&E application, page 13.

recovered over 8 years through generation rates charged exclusively to bundled customers.[5] Although the Joint Parties endorse the recovery of these costs in full (including AFUDC), TURN strongly opposes this element of the application. The Commission should deny PG&E the recovery of these costs in their entirety.

These costs were incurred by PG&E without any advance authorization by the Commission. Efforts to litigate these costs in past General Rate Cases were opposed by PG&E on the basis that they were not within the scope of those proceedings. PG&E has repeatedly opposed any efforts to assess the reasonableness of license renewal efforts in any proceeding since the dismissal of A.10-01-022 (which would have addressed these costs). PG&E has never previously received approval to create a memorandum count to track any expenditures on license renewal.

PG&E previously indicated that it would seek to recover these costs <u>only</u> if it decided to seek to relicense Diablo Canyon.[6] Yet now PG&E argues that these costs (including the $15.4 million in AFUDC) should be fully recoverable regardless of whether Diablo Canyon is shutdown or relicensed. Under PG&E's view, shareholders assume zero risk for these costs regardless of the amounts incurred or the success of the relicensing effort. Moreover, PG&E seeks to recover AFUDC despite the fact that, at best, the license renewal represents an abandoned project and is ineligible for recovery of any AFUDC costs.

TURN urges the Commission to reject this element of the application. In light of the fact that PG&E never received prior authorization from the Commission to incur these costs, proceeded with relicensing on its own initiative, and has now decided to abandon that effort, the Commission should find these costs ineligible for recovery

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[5] PG&E application, page 13.

[6] PG&E response to Petition of Friends of the Earth, P.14-10-007, November 10, 2014, page 10 ("To the extent PG&E decides to seek to relicense DCPP, it will likely file an application at the Commission to recover the license renewal costs.")

in rates. TURN intends to fully litigate this issue to protect the interests of ratepayers.

## IV. THE PROPOSALS FOR REPLACEMENT RESOURCES ARE INADEQUATE AND REQUIRE FURTHER DEVELOPMENT

The application identifies the goal of replacing the entire output of Diablo Canyon with 'GHG-free' resources to ensure that there are no adverse climate change consequences resulting from the permanent retirement of this facility. To achieve this outcome, the application calls for three tranches of procurement as "a first step towards" achieving the goal of climate neutrality.[7] The first tranche would involve the procurement of 2,000 GWh of incremental energy efficiency resources. In the second tranche, PG&E would procure another 2,000 GWh of either energy efficiency or other zero-GHG resources. In the third tranche, PG&E would agree to procure at least 55% of its retail sales from resources eligible for compliance with the state's Renewables Portfolio Standard (RPS). TURN does not believe that these three Tranches will satisfy the articulated goal of "replacing" Diablo Canyon output with zero GHG generation.

As a threshold matter, there is no dispute that these three tranches of procurement would not replace the approximately 18,000 GWh/year of Diablo generation with incremental zero-GHG resources. At best, these measures would replace approximately half of Diablo Canyon's output. Although not all replacement resources need be identified in this proceeding, the Commission should commit to the full replacement of Diablo Canyon output with zero GHG resources as a condition of approving the shutdown. TURN would support deferring some, but not all, of the details to a subsequent resource planning docket.

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[7] PG&E application, page 9.

TURN understands that only some of the key details relating to replacement resources need be resolved in this application. But the Joint Proposal falls short on this front and requires significant enhancements in order to legitimately claim that the retirement of Diablo Canyon will not lead to an increase in GHG emissions in the Western grid. The Commission can clarify the basic parameters and establish guidance to ensure that this goal will be met through resource planning directives that can be implemented in future proceedings.

### A. Concerns about the proposed procurement of Energy Efficiency

Under the Joint Proposal, PG&E proposes to procure 2,000 gross gigawatt-hours (GWh) in Tranche #1 of new EE projects and programs, incremental to its existing energy efficiency programs, to be installed from 2018-2024.[8] PG&E will "procure" 2,000 GWh through Requests for Offers (RFOs) but also reserves the right to launch its own new utility EE programs to meet the Tranche #1 target.[9] Tranche #1 EE will come online while Diablo Canyon is still operating at current levels.[10] PG&E also proposes to procure another 2,000 GWh per year from a mix of EE and zero-GHG resources between 2025-2030 in Tranche #2.[11] While wholeheartedly supporting the use of cost-effective EE as a replacement resource for Diablo Canyon, TURN is concerned that the proposed EE commitments may not be the most cost effective option, may not be met with bona fide incremental EE, and may not be sufficiently persistent to provide the benefits intended by the Joint Parties.

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[8] PG&E Testimony, p. 1-2; PG&E Testimony, p. 4-1. PG&E administers a portfolio of EE programs currently funded by and subject to the Commission's oversight in R.13-11-005, as well as a low-income energy efficiency program, the Energy Savings Assistance Program, which is currently the subject of A.14-11-007 et al.
[9] PG&E Testimony, p. 4-7.
[10] PG&E Testimony, p. 1-2 ("PG&E will continue to operate Diablo Canyon at current levels through the current license periods."); p. 2-1 (indicating that DCPP Unit 1 is licensed to operate until November 2, 2024, and Unit 2, until August 26, 2025).
[11] PG&E Testimony, p. 1-2, p. 3-4.

*1. Tranche #1 should include supply and demand-side resource options*

According to PG&E, the "objective of Tranche #1 is to achieve 'early action' energy savings prior to the retirement of Diablo Canyon in order to support flexibility in the timing of resources commitments in Tranche #2 and Tranche #3."[12] PG&E further points to concerns that the inclusion of supply-side resources in Tranche #1 procurement could exacerbate projected overgeneration conditions on the CAISO grid".[13] This explanation is not persuasive given the potential for many EE resources to also have a similar impact on overgeneration conditions by reducing customer demand in hours when net loads are already low. There is no guarantee that the load profile of a zero GHG supply resource would be more problematic for grid operations than a generic EE resource. If the overgeneration concerns can be managed through solicitation parameters, an all source RFO might be the better approach for Tranche #1.

TURN also questions whether EE resources offer a "least-cost option" compared to zero GHG supply resources.[14] Despite PG&E's proposal to limit EE bids to an RPS cost cap, it is entirely possible that many zero-GHG supply resources would bid well below the RPS cost cap. The only valid method of determining which options are the most cost-effective is to allow supply and demand-side resources to compete against each other in a solicitation.

[12] PG&E Testimony, p. 4-1.
[13] PG&E Testimony, p. 3-4.
[14] PG&E Testimony, p. 4-5; See also Joint Notice of *Ex Parte* Communication, filed by PG&E on behalf of the Joint Parties on Sept. 6, 2016, describing two separate meetings that occurred on Aug. 31, 2016 (PG&E reports that a representative of one of the Joint Parties, Ralph Cavanagh, also stated that "the joint proposal prioritizes energy efficiency because it is the least cost option and consistent with the loading order.")

2. *PG&E should be required to count EE on a "net" savings basis*

PG&E proposes to count EE procured through Tranche #1 and Tranche #2 toward the associated targets on a "gross" savings basis.[15] The use of "gross" energy savings includes some degree of savings from free riders.[16] Since EE savings can alternatively be measured on a "net" basis (meaning net of free riders), PG&E has not demonstrated the rationale for tracking energy savings from Tranche #1 and Tranche #2 on a gross rather than net basis. It is disingenuous to conflate "naturally occurring" savings from free riders with *incremental* EE resources attributable to the Tranche #1 and Tranche #2 activities.[17]

The Commission recently considered the relative merits of setting EE goals based on gross energy savings (gross goals) or savings net of free ridership (net goals) in the context of the utilities' existing EE portfolios. Since 2008, the EE portfolios have been designed to achieve gross energy savings goals, while net savings have also been used for other important purposes. In D.16-08-019, issued in R.13-11-005, the Commission concluded that future EE goals should be net goals, not gross goals.[18] The Commission pointed to the increased risk of free-ridership

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[15] PG&E Testimony, p. 4-4 ("Achievement of the Tranche #1 2,000 gross GWh target will be measured by summing the first year gross GWh savings from EE installed in 2018-2024."); PG&E Testimony, p. 5-3 ("For EE resources obtained in Tranche #2, the sum of first year gross GWh savings will count toward the 2,000 GWh per year target.").

[16] The Commission's Energy Efficiency Policy Manual (CPUC Energy Efficiency Policy Manual, Version 5, Appendix B: Glossary, pp. 53-54) defines gross savings as follows: "Gross savings count the energy savings from installed energy efficiency measures irrespective of whether or not those savings are from free riders, i.e., those customers who would have installed the measure(s) even without the financial incentives offered under the program. Gross savings are adjusted by a net-to-gross ratio to produce net savings, that is, to remove the savings associated with free riders."

[17] *See, e.g.*, PG&E Testimony, Chapter 1, Attachment A (Summary Report of Joint Proposal Workshop and Public Meetings), p. 1AtchA-6.

[18] D.16-08-019, pp. 19-20 (directing that the net "net" goals framework be effective by 2018 at the latest).

resulting from other recent policy changes required by AB 802 (Williams) and reasoned that a shift back to net goals would motivate EE program administrators to minimize free-ridership in their programs.[19] For the same reasons articulated by the Commission in D.16-08-019, TURN submits that PG&E's resource replacement plan for Diablo should likewise present EE commitments in terms of net savings.

3. *The absence of sufficient persistence requirements could significantly undermine the expected impact of EE procurement*

PG&E proposes to measure achievement toward the Tranche #1 target (2,000 GWh) "by summing first year gross GWh savings from EE installed in 2018-2024."[20] PG&E would also require that RFO participants show that their EE projects will have a savings persistence of at least five years.[21] This persistence requirement is critical because EE measures vary widely in their effective useful lives, and savings degradation must be expected over the life of the measure. However, it is unclear whether a five-year persistence requirement aligns with the intended purpose of reducing the need for replacement generation once Diablo Canyon closes.[22] Under PG&E's approach, Tranche #1 EE installed in 2019 could exceed its useful life as early as 2024 (before Diablo Canyon is retired). Even assuming installations as late as 2024, it is possible that none of the EE would continue to provide significant energy savings in 2030.

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[19] D.16-08-019, p. 19 ("However, the shift to a default existing conditions baseline, even with the exceptions identified later in this decision, creates a real and significant risk of a widening gap between expected and actual free ridership if programs target projects that customers have traditionally undertaken without any program intervention.").
[20] PG&E Testimony, p. 4-4, fn 12 (PG&E explains that "first-year savings is defined as the savings in the first full year after the EE project is installed. This is distinct from lifecycle savings (the total savings expected over the life of the project) and cumulative savings (the total savings achieved from installation to a specified future date)").
[21] PG&E Testimony, p. 4-6.
[22] *See, e.g.*, PG&E Testimony, p. 4-4.

TURN will urge the Commission to consider establishing minimum persistence requirements to ensure that any advance EE procurement will reduce the need for post-Diablo replacement resources at the time of shutdown and that anticipated EE savings will continue to yield reductions in both energy need and GHG emissions well past 2030. These outcomes are consistent with the goals of SB 350 relating to the doubling of cumulative energy efficiency savings and achieving 2030 GHG reduction targets. None of these outcomes are guaranteed in the Joint Proposal.

### B. Importance of additionality and new zero GHG resources

One key detail to be addressed in this proceeding relates to the need for replacement resources to be newly developed and incremental to the system. The Commission must recognize that the only way to achieve climate neutrality after the retirement of Diablo Canyon is to add a comparable quantity of new long-term zero-GHG resources to the system. Simply reshuffling existing zero GHG resources within the Western grid to create the appearance of progress will not satisfy the overall goal identified in the application and will undermine California's climate policy objectives. Similarly, allowing the zero GHG resources to count towards another unadjusted state requirement (such as RPS) would not yield any true additionality.

The Joint Proposal falls short of guaranteeing additionality for Tranche #2 because any zero-GHG resource may contribute towards the 2,000 GWh target so long as it produces energy that is provided "to customers in PG&E's service territory."[23] There is no requirement for the resource to be newly developed. Any renewable energy acquired via Tranche #2 could displace other procurement

[23] PG&E testimony, page 5-3.

that would otherwise be credited towards RPS compliance. Furthermore, allowing any "zero GHG" resource to participate would permit procurement from existing large hydroelectric generation located in the Northwest or British Columbia to count towards the replacement resource target. There are huge volumes of such resources at prices that are very attractive. These resources are typically able to schedule energy into California to serve PG&E customers under the current configuration of Balancing Authorities within the West. But procurement from these resources will not reduce GHG emissions. In fact, such procurement could trigger secondary dispatch of fossil generation in other parts of the West to serve customer loads outside of California.

The goal of neutralizing the real-world GHG emissions impact of a Diablo Canyon retirement will require the development of incremental new zero-GHG resources in equivalent quantities to the energy that would have otherwise been generated by Diablo Canyon. Authorizing the procurement of energy from existing hydroelectric resources and existing renewable generation will not accomplish this goal. The Commission should instead require that the Diablo replacement portfolio is sourced entirely from newly developed resources.

### C. Support for a nonbypassable obligation for all customers

TURN agrees with PG&E and the Joint Parties that the responsibility for procuring (or paying for) the Diablo replacement resources should fall on all customers regardless of whether they take bundled service or are alternatively served by a Community Choice Aggregator (CCA) or Electric Service Provider (ESP). Given the expected declines in bundled customer loads by 2025 and anticipated increases in renewable energy procurement, there is no need to replace the entire output of Diablo Canyon only to serve the unmet need of PG&E bundled customers.

The replacement of all lost Diablo output with new (and incremental) zero GHG resources will require participation by customers of other load-serving entities. PG&E's proposal would assess nonbypassable charges on all customers, including those served by CCAs and ESPs, for the procurement of replacement resources in Tranches #1, #2 and #3. The Application and Joint Proposal are silent about the cost recovery approach for remaining replacement resources beyond those identified in the Tranches. TURN generally supports the use of nonbypassable charges to collect costs for Diablo replacement resources but also endorses allowing CCAs and ESPs to engage in some self-provision for their share of the overall obligation so long as the procurement satisfies all the key criteria (zero GHG, new resources, additionality relative to RPS targets).

TURN believes that the Application fails to identify sufficient self-provision options by CCAs and ESPs and should be modified to make this choice available subject to very explicit requirements. TURN intends to propose meaningful alternative approaches that would permit CCAs and ESPs to participate in the development of new zero GHG replacement resources.

## V. PROPOSED SCHEDULE

PG&E proposes a highly accelerated schedule for consideration of its application, seeking to have intervenor testimony due at the end of October, and setting potential evidentiary hearings just before the December holidays. Given the significance of this proceeding, the large number of individual proposals contained in the application, and the complexity of the factual and policy issues, TURN urges the Commission to adopt a more measured schedule. Moreover, there is no urgency requiring near-term resolution of the application given the long timeline surrounding the proposed shutdown.

Given these realities, and after consultation with CLECA and ORA, TURN suggests the following alternative schedule:

| | **PG&E** | **TURN Alternative** |
|---|---|---|
| ORA/Intervenor testimony | October 28 | January 2017 |
| Rebuttal Testimony | November 30 | February 2017 |
| Evidentiary hearings | December 13-16 | March 2017 |
| Opening briefs | January 16, 2017 | April 2017 |
| Reply briefs | February 3, 2017 | May 2017 |
| Proposed Decision | May 2017 | July 2017 |
| Final Decision | June 2017 | August 2017 |

TURN intends to work with other parties to develop a schedule that will allow for the full consideration of all factual and legal issues presented in this proceeding.

Respectfully submitted,

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Dated: September 15, 2016